

CLAIMS

1. An image forming apparatus, which comprises:
conveying means, for conveying a sheet; sheet suction means,
for holding a sheet on a platen through suction; a print
5 head for, based on image data, moving in a direction
perpendicular to a sheet conveying direction and performing
printing on the sheet; and control means, for controlling
the conveying means and which alternately repeats, for each
path, a sheet conveying operation and a printing operation
10 a required number of times to form an image on the sheet,
characterized in that:

when the sheet is to be conveyed in a specific
direction a predetermined feeding distance (L_x) during the
conveying operation for each path, the control means
15 permits the conveying means to first convey the sheet a
predetermined distance (L_1) in the specific direction ($+X$
direction), then to convey the sheet a direction ($-X$), the
opposite of the specific direction ($+X$), a distance (L : $L =$
 $L_1 + \Delta L_1$) that is obtained by adding a short distance (ΔL_1)
20 to the predetermined distance (L_1), and to further convey
the sheet in the specific direction ($+X$) a distance ($L_x +$
 ΔL_1).

2. An image forming apparatus according to claim 1,
characterized in that:

25 the control means permits the conveying means to
repeat, multiple (n) times, during the conveying operation
for one path, the conveying of a sheet the predetermined

distance (L1) in the specific direction (+X direction) and reverse feeding of the sheet in the direction (-X), opposite the specific direction (+X), a distance (L: $L = L1 + \Delta L1$), which is obtained by adding a short distance ($\Delta L1$) to the predetermined distance (L1); and to finally convey the sheet in the specific direction (+X) a distance ($Lx + n \times \Delta L1$).

3. An image forming apparatus according to claim 2 or 3, characterized in that the sheet feeding distance (Lx), during the conveying operation, has relationships $L1 = Lx \times (0.5 \text{ to } 1)$ and $\Delta L1 = L1 \times (0.05 \text{ to } 0.3)$.

4. An image forming apparatus according to one of claims 1 to 3, characterized in that a heater is provided for the paten or a paper guide.

5. An image forming apparatus according to one of claims 1 to 4, characterized in that ink discharged from a print head is solvent ink.